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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jarmo Makinen

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6005

7590

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EXAMINER

HAN, CLEMENCE S

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/913,893

Applicant(s)

MAKINEN, JARMO

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Lenzo et al. (US 6,587,444).

Regarding to claim 1, Lenzo teaches a data transmission method of a radio link system between a central station and at least one substation comprising the steps of: transmitting a time division multiplex signal (upper frame in Figure 4B) at a first frequency ( $f_d$ ) from the central station B40; and receiving at the central station B40 signals of said at least one substation M40 at a second frequency ( $f_u$ ), said second frequency ( $f_u$ ) being a different frequency than said first frequency ( $f_d$ ) (Column 5 Line 55-56) and said signals of said at least one substation at said second frequency forming a time division multiple access signal (bottom frame in Figure 4B); wherein each of said at least one substation receives, within an initial time period (one data frame in Figure 4B) having time slots, at said first frequency

during certain first time periods having one or more time slots and corresponding to a specific substation; and wherein said specific substation transmits, within said initial time period, at said second frequency during certain second time periods having one or more time slots corresponding to said specific substation such that said first time periods are different time periods than said second time periods (Column 6 Line 8-12, also see Column 5 Line 67 - Column 6 Line 3).

Regarding to claim 2, Lenzo teaches the central station controls the time periods used for transmission and reception by the substations (Column 7 Line 45-55).

Regarding to claim 3, Lenzo teaches a radio link system, comprising: a central station B40 comprising means for discriminating reception signals from transmission signals on basis of frequency (Column 5 Line 55-56, Figure 4A); and at least one substation M40; wherein the central station B40 is configured so as to transmit a time division multiplex signal (upper frame in Figure 4B) at a first frequency ( $f_d$ ) and receive a time division multiplex access signals (bottom frame in Figure 4B) at a second frequency ( $f_u$ ); and wherein the at least one substation is configured so as to receive, within an initial time period constituted of time slots, at said first frequency during certain first time periods having one or more time slots and corresponding to a specific substation and said specific substation is

arranged to transmit, within said initial time period, at said second frequency during certain second time periods having one or more time slots and corresponding to said specific substation such that said first and second time periods are different time periods and signals transmitted by said at least one substation at said second frequency are arranged to form said time division multiplex access signal (Column 6 Line 8-12, also see Column 5 Line 67 - Column 6 Line 3).

Regarding to claim 4, Lenzo teaches the central station is configured to select said first and second time periods( Column 7 Line 45-55).

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claim 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenzo et al..

Regarding to claim 5-9, Lenzo teaches a wireless communication system 100 (Figure 1). Lenzo, however, does not explicitly teach a specific system. A GSM mobile communication system, a UMTS mobile communication system, a broadband data transmission system, a LMDS system and a HiperAccess system are all well known in the art wireless communication system. It would have been

obvious to one skilled in the art to modify Lenzo to be used in a specific system as a design choice.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is

(571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Clemence Han  
Examiner  
Art Unit 2665

  
STEVEN NGUYEN  
PRIMARY EXAMINER